



## CDF & D0 Computing Costs

Amber Boehnlein & Robert M. Harris
Directors Review of Run 2 Computing
Sep 11, 2003



## Analysis CPU Needs & Procurements



FY	CDF Need (THz)	CDF Speed (GHz)	CDF Duals Bought	CDF Cost (\$M)	D0 Need (THz)	D0 Speed (GHz)	D0 Duals Bought	D0 Cost (\$M)
03A	0.9	2.2	159	0.31	0.7	2.6	210	0.47
04E	2.2	3.5	346	0.76	0.7	4	157	0.34
05E	5.3	5.6	+525 -179	1.16	0.7	5	+236 -118	0.52
06E	7.5	8.8	+466 -159	1.03	0.7	6	+156 -78	0.34

The needs and costs are incremental for the given fiscal year.

The numbers for FY03 are actual, the numbers for FY04-06 are estimates.

The CDF speeds are PIII equivalent, the D0 speeds are PIV (same FY03 cpus for both)



## Cache Disk Needs & Procurements



FY	CDF Needs (TB)	CDF Servers Bought	CDF Server (TB)	CDF Cost (\$M)	D0 Needs (TB)	D0 Servers Bought	D0 Server (TB)	D0 Cost (\$M)
03A	98	18	5	0.34	120	5	2.5	0.05
04E	105	10	8	0.20	120	33	3.5	0.36
05E	319	+32-57	13	0.64	120	21	5.5	0.23
06E	478	+28-18	20	0.56	120	13	8.7	0.14

The needs and costs are incremental for the given fiscal year.

The numbers for FY03 are actual, the numbers for FY04-06 are estimates.

The CDF speeds are PIII equivalent, the D0 speeds are PIV (same FY03 cpus for both)



## Reconstruction & Reprocessing Farms CDF at Fermilab, D0 Worldwide



FY	CDF Needs (GHz)	CDF Duals Bought	CDF Speed (GHz)	CDF Cost (\$M)	D0 Needs (GHz)	D0 Duals Bought	D0 Speed (GHz)	D0 Cost (\$M)
04	320	+64 - 64	3.5	0.19	4615	978	4	2.38
05	600	+64 - 64	5.6	0.19	5539	905	5	2.19
06	600	+64 -64	8.8	0.19	7385	764	6	1.87

The needs and costs are incremental for the given fiscal year.

The numbers for FY03 are actual, the numbers for FY04-06 are estimates.